

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Consolidated Request of the WCS Coalition	)	WT Docket No. 06-102
For Limited Waiver of Construction Deadline for	)	
132 WCS Licenses	)	
	)	
Request of WCS Wireless, LLC for	)	
Limited Waiver of Construction	)	
Deadline for 16 WCS Licenses	)	
	)	
Request of Cellutec, Inc. for Limited Waiver	)	
Of Construction Deadlines for	)	
Stations KNLB242 and KNLB216 in	)	
Guam/Northern Mariana and American Samoa	)	

**ORDER**

**Adopted: December 1, 2006**

**Released: December 1, 2006**

By the Acting Chief, Wireless Telecommunications Bureau:

**I. INTRODUCTION**

1. In this *Order*, we address three requests for waiver and/or extension of the construction deadline for Wireless Communications Service (WCS) licenses. The WCS Coalition filed the first request for waiver on March 22, 2006, on behalf of several companies that hold 132 WCS licenses in the 2.3 GHz band that are scheduled to expire on July 21, 2007.<sup>1</sup> Specifically, the WCS Coalition filed a consolidated request for a limited waiver of Section 27.14(a) of the Commission's rules, which requires WCS licensees to make a showing of substantial service in their license area by the end of their initial license term.<sup>2</sup> The coalition also requested that we conditionally renew WCS licenses at the July 2007 renewal date, subject to a showing of substantial service in July 2010. In its May 12, 2006 comments supporting the WCS Coalition requests, WCS Wireless, LLC together with its subsidiary WCS Wireless License Subsidiary, LLC (collectively, WCS Wireless) filed its own request for waiver of the construction deadline for sixteen WCS licenses (WCS Wireless Request).<sup>3</sup> On June 9, 2006, Cellutec, Inc. (Cellutec)

<sup>1</sup> Consolidated Request for Limited Extension of Deadline for Establishing WCS Compliance With Section 27.14 Substantial Service Requirement, filed by the WCS Coalition (WCS Coalition Request) (Mar. 22, 2006). The WCS Coalition is made up of eight companies that indirectly hold the majority of WCS licenses authorized to operate within the continental United States: AT&T, Inc., BellSouth Corporation, Comcast Corporation, NextWave Broadband Inc., NTELOS, Inc., Sprint Nextel Corporation, Verizon Laboratories Inc., and WaveTel NC License Corporation. *Id.* at 1. The Mobility Division released a *Public Notice* soliciting comment on the WCS Coalition waiver request. *See* n.30, *infra*.

<sup>2</sup> Because of the process under which WCS was initially licensed, the deadline for all WCS licenses for meeting the construction requirement is the same date, July 21, 2007.

<sup>3</sup> Statement in Support of Consolidated Request for Limited Extension of Build Out Deadline and Request for Waiver of Section 27.14(a), filed by WCS Wireless, LLC and WCS Wireless License Subsidiary, LLC (May 12, 2006) (WCS Wireless Request). On August 16, 2006, WCS Wireless formally filed its extension request in the Universal Licensing System.

filed comments in support of the WCS Coalition requests and also sought similar relief for its WCS Stations KNLB242 and KNLB216 located in the Guam/Northern Mariana and American Samoa markets (Cellutec Request).<sup>4</sup> In addition, Cellutec requested that we extend the term of its licenses. For the reasons discussed below, we find that the public interest is served by granting an extension of the construction deadline until July 21, 2010 for the licenses listed in Attachment A to this *Order*. We also deny the WCS Coalition's request that we conditionally renew WCS licenses at the July 2007 renewal date and Cellutec's request that we extend the term of its licenses.

## II. BACKGROUND

2. In early 1997, the Commission reallocated the 2.3 GHz band, in part, to provide WCS and satellite Digital Audio Radio Service (SDARS). The Commission adopted service and competitive bidding rules under Parts 27 and 25, respectively, and completed auctions of the spectrum in April 1997.<sup>5</sup> On July 21, 1997, the Commission granted 126 WCS licenses<sup>6</sup> to operate in the 2305-2320 MHz and 2345-2360 MHz frequency bands<sup>7</sup> on four channel blocks (A-D).<sup>8</sup> SDARS operates on an exclusive basis in the 25 MHz of spectrum (2320-2345 MHz) located between the two WCS bands,<sup>9</sup> and is currently licensed to Sirius Satellite Radio, Inc. (Sirius) and XM Radio Inc. (XM Radio).<sup>10</sup>

3. WCS licensees may provide a range of services, including "fixed, mobile, radiolocation, and broadcasting-satellite (sound) services."<sup>11</sup> Initial authorizations for WCS licenses are ten years from

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<sup>4</sup> Comments, filed by Cellutec, Inc. supporting the WCS Coalition Request and requesting similar relief (June 9, 2006) (Cellutec Comments). On August 31, 2006, Cellutec formally filed its extension request in the Universal Licensing System. See Request for Waiver of Deadline for Establishing Compliance with § 27.14 Substantial Service Requirement and for Extension of License Expiration Date, filed by Cellutec, Inc. (Cellutec Request) (Aug. 31, 2006).

<sup>5</sup> FCC Announces Auction Winners for Digital Audio Radio Service, *Public Notice*, 12 FCC Rcd 18727 (1997); WCS Auction Closes, Winning Bidders in the Auction of 128 Wireless Communications Service Licenses, *Public Notice*, 12 FCC Rcd 21653 (1997). The SDARS auction closed on April 2, 1997, and the WCS auction closed on April 25, 1997.

<sup>6</sup> FCC Announces the Grant of Wireless Communications Service ("WCS") Licenses, Balance of Winning Bids are Due by August 4, 1997, *Public Notice*, 13 FCC Rcd 4782 (1997).

<sup>7</sup> In the Matter of Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service ("WCS"), GN Docket No. 96-228, *Report and Order*, 12 FCC Rcd 10785 (1997) (*WCS Report and Order*). WCS is a product of congressional legislation directing the Commission to establish wireless services in the 2305-2320 MHz and 2345-2360 MHz bands, and to initiate competitive bidding of the spectrum by April 15, 1997. Omnibus Consolidated Appropriations Act, 1997 PUB. L. 104-208, 110 STAT. 3009 (1996).

<sup>8</sup> *WCS Report and Order*, 12 FCC Rcd at 10807 ¶ 45. Specifically, Channel Block A is located at 2305-2310 MHz and 2350-2355 MHz; Channel Block B is located at 2310-2315 MHz and 2355-2360 MHz; Channel Block C is located at 2315-2320 MHz; and Channel Block D is located at 2345-2350 MHz. *Id.* at 10808 ¶ 45; 47 C.F.R. § 27.5(a). The two paired 10 MHz channel blocks are each licensed in 52 Major Economic Areas, and the two unpaired 5 MHz channel blocks are each licensed in 12 Regional Economic Area Groupings. *WCS Report and Order*, 12 FCC Rcd at 10814 ¶ 54; 47 C.F.R. § 27.5(a).

<sup>9</sup> In the Matter of Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band, *Report and Order, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 12 FCC Rcd 5754, 5785 ¶ 73 (1997) (*SDARS R&O and FNPRM*); 47 C.F.R. § 25.214(c).

<sup>10</sup> The 2320-2345 MHz band is divided into two 12.5 MHz segments (2320-2332.5 MHz and 2332.5-2345 MHz). Sirius, formerly Satellite CD Radio, Inc., is licensed on the 2320-2332.5 MHz portion, and XM Radio, formerly American Mobile Radio Corporation, is licensed on the 2332.5-2345 MHz portion of the SDARS band.

<sup>11</sup> See *WCS Report and Order*, 12 FCC Rcd at 10797 ¶ 25.

the date the authorizations are issued.<sup>12</sup> At the end of the initial license term, WCS licensees must make a showing of “substantial service” in their licensed area.<sup>13</sup> The Commission explained that it adopted a “very flexible build-out requirement” to “promote efficient use of the spectrum, encourage the provision of service to rural, remote and insular areas and prevent the warehousing of spectrum.”<sup>14</sup> Failure of any WCS licensee to meet the construction requirement results in forfeiture of the license.<sup>15</sup>

4. In adopting rules governing SDARS, the Commission recognized that applicants intended to implement, as necessary, terrestrial repeaters, or “gap-fillers,” in urban canyons and other areas where it may be difficult to receive DARS signals transmitted by a satellite. Terrestrial repeaters re-transmit information from the satellite to overcome the effects of signal blockage and multipath interference.<sup>16</sup> Terrestrial repeaters are a complementary part of the SDARS satellite system and also operate on the 25 MHz of spectrum located between the WCS bands. The Commission proposed to adopt rules for terrestrial repeaters in its *Further Notice of Proposed Rulemaking* released in conjunction with its *SDARS Report and Order*.<sup>17</sup> While the *Further Notice* remains pending before the Commission, Sirius and XM Radio have obtained Special Temporary Authority (STA) to operate terrestrial repeaters in several markets.<sup>18</sup> The International Bureau granted the STAs on the condition, *inter alia*, that all licensed WCS facilities must be protected from interference caused by the SDARS repeaters, and that any interference that may arise from use of the terrestrial repeaters must be resolved immediately through established points of contact.<sup>19</sup>

5. *Request for Extension of Construction Deadline.* The WCS Coalition filed its request on March 22, 2006, seeking either a three-year extension of the July 21, 2007 construction deadline, as long as the Commission adopts permanent rules for SDARS terrestrial repeaters before that deadline, or a three-year extension from the date the Commission releases an order adopting rules for the SDARS terrestrial repeaters.<sup>20</sup> It also requests that the Commission “routinely process and grant applications for

<sup>12</sup> *WCS Report and Order*, 12 FCC Rcd at 10840 ¶¶ 104-106; 47 C.F.R. § 27.13(a).

<sup>13</sup> 47 C.F.R. § 27.14(a).

<sup>14</sup> *WCS Report and Order*, 12 FCC Rcd at 10843 ¶ 111.

<sup>15</sup> *WCS Report and Order*, 12 FCC Rcd at 10843 ¶ 113; 47 C.F.R. §§ 27.14 (a).

<sup>16</sup> *SDARS R&O and FNPRM*, 12 FCC Rcd at 5810 ¶ 138.

<sup>17</sup> *SDARS R&O and FNPRM*, 12 FCC Rcd at 5812 ¶ 142. The Commission subsequently sought comment to refresh the record. *Public Notice*, Report No. SPB-112 (Dec. 23, 1997); *Public Notice*, IB Docket No. 95-91 (Jan. 21, 2000).

<sup>18</sup> XM Radio filed its STA request on July 12, 2001, and Sirius filed its STA request on July 24, 2001. In the Matter of XM Radio, Inc. Application for Special Temporary Authority to Operate Satellite Digital Audio Radio Service Complementary Terrestrial Repeaters, *Order and Authorization*, 16 FCC Rcd 16781 (IB Sept. 17, 2001), *modified*, 16 FCC Rcd 18484 (IB Oct. 15, 2001) (*XM Radio 2001 STA Order*); In the Matter of Sirius Satellite Radio, Inc. Application for Special Temporary Authority to Operate Satellite Digital Audio Radio Service Complementary Terrestrial Repeaters, *Order and Authorization*, 16 FCC Rcd 16773 (IB Sept. 17, 2001), *modified*, 16 FCC Rcd 18481 (IB Oct. 15, 2001) (*Sirius 2001 STA Order*). In March 2002, Sirius and XM Radio requested renewal of the STAs. Because no action has been taken on these requests, the licensees may continue operations under the initial authorizations. See 47 C.F.R. § 1.62.

<sup>19</sup> *XM Radio 2001 STA Order*, 16 FCC Rcd at 16785-86 ¶¶ 13-14; *Sirius 2001 STA Order*, 16 FCC Rcd at 16777-78 ¶¶ 13-14.

<sup>20</sup> See WCS Coalition Request at 2-3; See also 47 C.F.R. § 27.14(a). Section 27.14(a) provides that “AWS and WCS licensees must make a showing of “substantial service” in their license area within the prescribed license term set forth in § 27.13.” *Id.* Section 27.13 provides that “[i]nitial WCS authorizations for the 2305-2320 MHz and 2345-2360 MHz bands will have a term not to exceed ten years from the date of original issuance or renewal.” 47 C.F.R. § 27.13(a).

WCS license renewal in 2007, conditioned upon the submission of a substantial service showing by July 21, 2010.”<sup>21</sup> The WCS Coalition asserts that a three-year extension is necessary due to the uncertainty regarding the rules governing the operation of adjacent band SDARS terrestrial repeaters and the degree to which WCS operations will be protected from harmful interference.<sup>22</sup> It states that this uncertainty has hindered WCS equipment development, network design, and facility deployment.<sup>23</sup> The WCS Coalition also explains that currently available equipment is either proprietary or will not support economically viable offerings of advanced wireless services, including wireless broadband services to consumers.<sup>24</sup> For the same reasons, Cellutec asks that the Commission grant an extension of the construction deadline for its licenses as well as an extension of the license expiration date.<sup>25</sup>

6. The WCS Coalition further states that resolution of technical issues associated with terrestrial SDARS repeaters will allow deployment of WCS equipment for broadband and other advanced services to the public, including service to rural and other underserved areas.<sup>26</sup> Without an extension, the WCS Coalition argues, significant capital investment would be expended to deploy sub-optimal services to meet the existing construction deadline and preserve the licenses.<sup>27</sup> Further, the WCS Coalition contends that an extension is warranted because these circumstances are beyond the WCS licensees’ control.<sup>28</sup> Finally, the WCS Coalition argues that the extension would be consistent with Commission precedent where equipment is scarce and deployment too costly. Specifically, they argue that granting an extension in this case is supported by previous instances where construction deadlines were extended for licensees committed to deploying advanced technologies under development, but not widely available by the applicable construction benchmark.<sup>29</sup>

7. Comments. The Mobility Division released a *Public Notice* on May 10, 2006, asking for comment on the WCS Coalition Request.<sup>30</sup> We received seven comments, three from equipment manufacturers, in support of the WCS Coalition Request, and two comments opposing the WCS Coalition

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<sup>21</sup> WCS Coalition Request at 4.

<sup>22</sup> *Id.* at 2. The WCS Coalition also contends that a variety of unique challenges have created uncertainty for WCS, including a Congressional mandate to auction the spectrum in a short time frame; the undeveloped nature of equipment at the time of auction; a post-auction proposal to deploy domestic satellite service in the WCS band; and prolonged negotiations with Mexico regarding signal levels for Mexican satellites operating in the WCS band with footprints covering portions of the United States. *Id.* at 4.

<sup>23</sup> *Id.* at 2, 12.

<sup>24</sup> *Id.* at 13.

<sup>25</sup> See Cellutec Request at 2-3.

<sup>26</sup> *Id.* at 11.

<sup>27</sup> *Id.* at 3, n. 4, 11.

<sup>28</sup> *Id.* at 4, n. 4, 12-15.

<sup>29</sup> *Id.* at 12. The WCS Coalition focused on several cases including: In the Matter of Request of Warren C. Havens for Waiver or Extension of the Five-year Construction Requirement for 220 MHz Service Phase II Economic Area and Regional Licensees, *Memorandum Opinion and Order*, 19 FCC Rcd 12994 (WTB 2004) (*Havens 220 MHz Order*) (extending construction requirement to allow for the use of next-generation digital technology in the band); FCI 900, Inc. Expedited Request for 3-Year Extension of 900 MHz Band Construction Requirements and Petition for Declaratory Ruling, *Memorandum Opinion and Order*, 16 FCC Rcd 11072, 11077-78 ¶¶ 8-9 (2001) (*FCI 900, Inc.*).

<sup>30</sup> Wireless Telecommunications Bureau Seeks Comment on Consolidated Request by the WCS Coalition for Waiver of Wireless Communications Services (WCS) Construction Rule, *Public Notice*, 21 FCC Rcd 5148 (WTB MD 2006).

Request.<sup>31</sup> The WCS Coalition and XM Radio also filed responsive comments.<sup>32</sup> Supporting comments agree with the WCS Coalition's contention that the regulatory uncertainty regarding the rules and technical requirements for terrestrial SDARS repeaters has hindered WCS deployment and created equipment problems. Supporting comments contend that without certainty about the extent to which WCS will be vulnerable to harmful interference from SDARS terrestrial repeaters, "WCS licensees cannot design and deploy networks capable of providing the fast, reliable quality of service that consumers demand, and equipment suppliers will be unable to complete development of products for use in the 2.3 GHz band within the United States."<sup>33</sup> As Motorola states in its comments, "[w]hile WCS Coalition members have deployed a variety of limited fixed service systems, the technical uncertainty surrounding the band has stymied larger-scale deployments."<sup>34</sup> Motorola also states that the stringent out-of-band emission (OOBE) limits have hindered WCS deployment.<sup>35</sup>

8. Sirius and XM Radio oppose any extension for WCS licensees, arguing that the difficulties faced by the WCS community were known at the time they obtained the licenses at auction.<sup>36</sup> XM Radio contends that the waiver request is based on business decisions, not circumstances beyond the control of the WCS licensees.<sup>37</sup> Opposing commenters also state that the WCS licensees were aware of the stringent OOBE requirements when they bid on the licenses, and that if those limitations impede equipment development, it is part of the business risk undertaken by the WCS licensees.<sup>38</sup> Sirius also points out that the large difference in price between WCS and SDARS licenses reflects the technical limitations attached to the WCS licenses.<sup>39</sup> XM Radio contends that the "regulatory uncertainty" faced by

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<sup>31</sup> The comments filed in support of the WCS Coalition Request include: WCS Wireless Request; Cellutec Request; Comments of Intel Corporation (June 9, 2006) (Intel Comments); Comments, filed by DigitalBridge Communications, LLC (June 9, 2006) (DBC Comments); Comments of Motorola, Inc. (June 9, 2006) (Motorola Comments); Comments of Navini Networks (June 9, 2006) (Navini Comments); and Reply Comments of Soma Networks, Inc. Comments in opposition include: Opposition of Sirius Satellite Radio, Inc. (June 9, 2006) (Sirius Opposition); and Comments of XM Radio, Inc. (June 9, 2006) (XM Radio Opposition). We also note that the National Association of Broadcasters (NAB) submitted comments, but on the issue of local origination of content on SDARS terrestrial repeaters, not on the request for an extension of the construction requirement. Comments of the National Association of Broadcasters (June 9, 2006) (NAB Comments). Finally, we note that on August 2, 2006, Fujitsu Network Communications filed untimely comments addressing WiMax equipment. Although we generally do not accept late-filed pleadings, we find that the public interest would be served by our consideration of the full record and therefore accept this pleading.

<sup>32</sup> Reply Comments of the WCS Coalition (June 23, 2006) (WCS Coalition Reply Comments); Reply Comments of XM Radio, Inc. (June 23, 2006) (XM Radio Reply Comments).

<sup>33</sup> WCS Coalition Request at 9. As Intel points out, it has now developed broadband equipment using the 2.3 GHz band for use in the Asia market, but it has not yet finalized plans for 2.3 GHz products in the United States, again, according to Intel, because of the regulatory uncertainties surrounding the band. Intel Comments at 2; *see* WCS Wireless Request at 5 (stating that "[w]ithout information on what interference protection WCS licensees must provide SDARS licensees and on what interference protection SDARS licensees must provide WCS licensees, it becomes impractical for vendors to design, price and offer equipment in the WCS bands."); Motorola Comments at 5 (stating that "[t]he lack of technical rules governing adjacent band satellite DARS repeater stations results in uncertainty in how to design WCS equipment"); Navini Comments at 1 (stating that "the continuing lack of permanent rules for terrestrial DARS repeaters impacts the WCS licensees' ability to develop and implement mobile wireless broadband networks that provide the ubiquitous, fast, and reliable service that consumers demand").

<sup>34</sup> Motorola Comments at 2.

<sup>35</sup> *Id.* at 5.

<sup>36</sup> XM Radio Opposition at 9; Sirius Opposition at 10.

<sup>37</sup> XM Radio Opposition at 10-11.

<sup>38</sup> Sirius Opposition at 11; XM Radio Opposition at 9.

<sup>39</sup> Sirius Opposition at 3-4, 13.

WCS licensees is inherent in the rulemaking process.<sup>40</sup> Sirius and XM Radio also contend that WCS broadband equipment has been available for four years and WCS licensees were aware of the risk that mobile might not be feasible before the licenses were auctioned.<sup>41</sup> They argue further that the issues raised by the WCS Coalition associated with SDARS repeaters do not justify an extension because these repeaters currently operate on a non-interference basis to WCS operations, and the *Further Notice of Proposed Rulemaking* on terrestrial repeaters was issued before the WCS auction.<sup>42</sup> Finally, XM Radio argues that the cases cited by the WCS Coalition, where construction extensions were granted due to a lack of equipment, are distinguishable from the instant case.<sup>43</sup>

### III. DISCUSSION

9. We grant a three-year extension of the ten-year construction requirement under Section 27.14(a) of the Commission's rules for the licenses listed in Attachment A to this *Order*. Pursuant to section 1.946(e)(1) of the Commission's rules, an extension of time to complete construction may be granted if the licensee shows that the failure to complete construction is due to causes beyond its control.<sup>44</sup> As discussed below, we find that WCS licensees have demonstrated that they face factors beyond their control that have limited their options in providing service, but that new technology solutions may be available in the near future. We therefore believe that strict enforcement of Section 27.14(a) in this instance would not be in the public interest.

10. We agree with the WCS Coalition that limited deployment attempts using available equipment have been marred by technical problems or proved to be economically infeasible.<sup>45</sup> As the Coalition states, other equipment deployments, such as BellSouth's recent limited launch of commercial broadband operations in four markets, cannot be replicated by other licensees because BellSouth's technology is proprietary.<sup>46</sup> We are persuaded by the commenters that relatively restrictive OOB limits may have impeded the development of WCS equipment and have contributed to the unique circumstances of the band.<sup>47</sup> Moreover, participation by almost all of the licensees in the WCS industry in this

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<sup>40</sup> XM Radio Opposition at 8.

<sup>41</sup> Sirius Opposition at 10; XM Radio Opposition at 8.

<sup>42</sup> XM Radio Opposition at 5; Sirius Opposition at 12.

<sup>43</sup> XM Opposition at 9.

<sup>44</sup> 47 C.F.R. § 1.946(e)(1). Further, the Wireless Telecommunications Bureau (Bureau) has recognized that "compliance with construction requirements may be difficult at times," and "the Commission has stated that, in situations in which the circumstances are unique and the public interest would be served, it would consider waiving construction requirements on a case-by-case basis." *See Havens 220 MHz Order*, 19 FCC Rcd at 13000 ¶ 14.

<sup>45</sup> *Id.* at 12, n.25. The WCS Coalition explains that Verizon conducted two separate trials of pre-WiMAX proprietary equipment using WCS spectrum from approximately July 2002 to March 2003. Verizon conducted the first test in Herndon, VA using equipment manufactured by BeamReach Networks, Inc., and the second test in Ellicott City, MD using equipment manufactured by SOMA Networks, Inc. *Id.*

<sup>46</sup> *See* WCS Coalition Request at 5-6, n.12. In September 2005, BellSouth launched a WCS-based broadband system in Palatka, Florida, a rural market area. In December 2006, it expanded the service to another rural area in Deland, Florida. *Id.* Bell South also launched commercial wireless broadband services over limited geographic areas in New Orleans, Louisiana as well as Gulfport and Biloxi, Mississippi to help restore services in areas devastated by Hurricane Katrina. *Id.* These limited deployments, however, use "pre-WiMAX" technology that is not viable for widespread deployments. *Id.*

<sup>47</sup> *See* Motorola Comments at 8; Intel Comments at 2; WCS Reply Comments at 11-12.

proceeding leads us to believe that the technical and equipment challenges in this band are widespread.<sup>48</sup>

11. We believe that this situation is similar to previous instances where the Bureau extended applicable construction deadlines as a result of a lack of equipment. For example, in the *Havens 220 MHz Order*, the Bureau found an extension was warranted because: (i) while equipment with limited functionality was available at the time of the request, an extension would provide the equipment market time to develop the next-generation digital technology that might allow for viable commercial operation of voice or data networks in the 220 MHz band;<sup>49</sup> and (ii) the 220 MHz band's narrow, non-contiguous channels contributed to unique circumstances that limited equipment options.<sup>50</sup> In addition, in *FCI 900, Inc.*, the Bureau granted an extension of the construction deadline to allow the introduction of innovative digital 900 MHz voice services rather than require construction of stop-gap, legacy systems.<sup>51</sup>

12. We believe a similar situation exists in this proceeding and disagree with XM Radio that these cases are "readily distinguishable."<sup>52</sup> For example, although a few WCS licensees have conducted trials using WCS spectrum<sup>53</sup> and have some limited equipment options, these options are not widely accepted or based upon open protocols and have not yet proven suitable for widespread deployment of advanced wireless services.<sup>54</sup> Based on trials conducted over the past eight years, WCS licensees have determined that the most viable business model for WCS spectrum is to provide advanced wireless services, including wireless broadband.<sup>55</sup> In addition, the record in this proceeding shows that new

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<sup>48</sup> See *Havens 220 MHz Order*, 19 FCC Rcd at 13002, ¶ 19 (fact that twenty-three licensees have sought relief leads us to believe that the technical and equipment challenges in this band are widespread).

<sup>49</sup> *Havens 220 MHz Order*, 19 FCC Rcd at 13001 ¶ 16.

<sup>50</sup> See *id.* at 13000-01 ¶ 15; see also, Request of Warren C. Havens for Waiver of the Five-Year Construction Requirement for his Multilateration Location and Monitoring Service Economic Area Licenses, *Memorandum Opinion and Order*, 19 FCC Rcd 23742 (2004) (*Havens LMS*) (unique spectrum sharing situation and regulations contributed to a lack of equipment in 902-928 MHz band making strict application of construction requirement contrary to the public interest).

<sup>51</sup> *FCI 900, Inc.*, 16 FCC Rcd 11076 ¶ 6.

<sup>52</sup> XM Radio Opposition at 9. In particular, XM Radio argues that these cases are unavailing because: (1) equipment is available for WCS; (2) the collective business judgment of WCS licensees makes equipment "unavailable," not technical problems; and (3) because the WCS Coalition is made up of "some of the largest telecommunications companies in the world," it should be able to get manufacturers to invest in WCS equipment. *Id.* at 10-11.

<sup>53</sup> WCS Coalition Request at 12, n.25. The WCS Coalition explains that AT&T Inc. launched the service on a trial basis in the Dallas/Fort Worth market in 2000 and, during 2001 and 2002, undertook full commercial launch of the service in Los Angeles, San Diego, Houston, Galveston, Corpus Christi, Santa Barbara, Seattle, Vallejo, Chicago, and Alaska markets. *Id.* According to the WCS Coalition, AT&T ultimately discontinued the service because costs proved too high and technical problems proved too difficult to surmount. *Id.* The WCS Coalition also explains that Comcast developed and tested, in conjunction with Hybrid Networks Inc., ADC Telecommunications, Inc., and California Amplifier, Inc., a one-way 10 Mbps High-Speed Internet modem with telephone return fixed wireless service using WCS spectrum. *Id.*

<sup>54</sup> See *id.* at 5-6, n.12; see also Motorola Comments at 3-4. As the WCS Coalition explains, while equipment compliant with WiMAX profiles is currently being developed for use in the 2.3 GHz spectrum, certification and equipment production for operation in the United States will not likely occur in time for that equipment to be deployed before the July 21, 2007 construction deadline. WCS Coalition Request at 6; WCS Coalition Reply Comments at 14.

<sup>55</sup> In fact, the WCS Coalition states that over the past eight years, WCS licensees have launched fixed service offerings on a limited basis, leading many WCS licensees to conclude that the most viable business model for WCS spectrum is to provide advanced wireless services, including wireless broadband. WCS Coalition Request at 5-6.

WiMAX technology may be available in the 2.3 GHz band in the next few years.<sup>56</sup> Moreover, the WCS Coalition has indicated that, in the event the Commission declines to extend the WCS construction deadline, many, if not all, of its members would build sub-optimal, stop-gap systems intended simply to preserve their licenses.<sup>57</sup> As in *FCI 900, Inc.*, we conclude that the public interest would be ill-served by compelling WCS licensees to devote their resources to the construction of stop-gap, legacy systems merely to meet the July 21, 2007 construction deadline rather than consumer demand.

13. For these reasons, we grant an extension of the construction deadline for the licenses listed in Attachment A to this *Order* for three years, from July 21, 2007, to July 21, 2010. We expect WCS licensees to take advantage of this relief and aggressively develop equipment and service options for the 2.3 GHz band. The extension of the construction deadline until July 21, 2010, is intended to give WCS licensees additional flexibility to develop equipment and to deploy services based on opportunities available to them in the near future.

14. Although we agree that a three-year construction deadline extension is warranted in this case, we reject the WCS Coalition's argument that the timing of relief should be based on the resolution of the pending SDARS repeaters rulemaking. We believe that a lack of certainty regarding the construction deadline could act as a disincentive for WCS licensees to expeditiously develop technological solutions for the band and construct systems. This would undermine one of the purposes of the construction requirement—to prevent spectrum warehousing.<sup>58</sup> In addition, we note that the WCS operating rules are established and that, with respect to the pending SDARS repeaters rulemaking, WCS licensees will be able to participate in that proceeding to ensure that their interests are considered.

15. We also deny the WCS Coalition's request to conditionally grant renewal for the subject licenses, and we deny Cellutec's request to extend the license terms of its licenses to coincide with the new construction deadline.<sup>59</sup> Because the members of the Coalition have not filed renewal applications at this time, a ruling on prospective renewal requests would be premature.<sup>60</sup> Moreover, we find that Cellutec has not provided sufficient justification to warrant a waiver and extension of its license term.<sup>61</sup> Thus, while we are extending the deadline to meet the construction requirements, we remind WCS licensees that

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<sup>56</sup> WCS Coalition Request at 10, n.21. WiMAX (World Interoperability for Microwave Access, Inc.) is a wireless broadband technology based on the IEEE 802.16 standard, which supports delivery of last mile wireless broadband access as an alternative to cable and DSL. WiMAX can support fixed and nomadic, as well as portable and mobile wireless broadband applications without the need for direct line-of-sight with a base station. WiMAX Forum White Paper, Third Plugfest – Sophia Antipolis at 4 (Mar. 2006) (*WiMAX Forum White Paper*).

<sup>57</sup> See WCS Coalition Reply Comments at 10.

<sup>58</sup> The Commission adopted the construction requirement for WCS in part to fulfill its obligations under section 309(j) of the Communications Act of 1934, as amended, which requires the Commission to include “safeguards to protect the public interest in the use of the spectrum” and performance requirements “to ensure prompt delivery of service to rural areas, to prevent stockpiling or warehousing of spectrum by licensees or permittees, and to promote investment in and rapid deployment of new technologies and services.” 47 U.S.C. §§ 309(j)(3), 309(j)(4)(B); see *WCS Report and Order*, 12 FCC Rcd at 10848 ¶ 114.

<sup>59</sup> See WCS Coalition Request at 4; Cellutec Request at 1, 3.

<sup>60</sup> In fact, renewal applications may not be filed until ninety days prior to license expiration. See 47 C.F.R. § 1.949.

<sup>61</sup> Pursuant to section 1.925 of the Commission's rules, a waiver of the Commission's rules may be granted, where the petitioner demonstrates that (1) the underlying purpose of the rule would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or (2) in view of unique or unusual factual circumstances of the instant case, application of the rule would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative. 47 C.F.R. § 1.925.

wish to renew their licenses that they must timely file a renewal application in compliance with the Commission's rules for its licenses.<sup>62</sup>

16. Finally, we note that the issues raised in NAB's Comments are outside the scope of this proceeding. NAB urges the Commission to resolve the SDARS terrestrial repeater rulemaking, but then addresses the issue of local origination of broadcast content on the SDARS terrestrial repeaters.<sup>63</sup> NAB also argues that the Commission should refrain from authorizing unlicensed devices in the television broadcast bands until it has determined whether advanced wireless services are underutilized in the 2.3 GHz band.<sup>64</sup> Neither issue is relevant to the requests for waiver of the WCS construction requirement.

#### IV. ORDERING CLAUSES

17. Accordingly, IT IS ORDERED that, pursuant to sections 4(i) and 303(r) of the Communications Act, as amended, 47 U.S.C. §§ 154(i), 303(r), and sections 0.331 and 1.946(e) of the Commission's rules, 47 C.F.R. §§ 0.331, 1.946(e), the construction deadlines for the Wireless Communications Service licenses listed in Attachment A to this *Order* are extended to July 21, 2010.

18. IT IS FURTHER ORDERED that, pursuant to sections 4(i) and 303(r) of the Communications Act, as amended, 47 U.S.C. §§ 154(i), 303(r), and sections 0.331 and 1.949 of the Commission's rules, 47 C.F.R. §§ 0.331, 1.949, the request filed by the WCS Coalition to conditionally grant applications for WCS license renewal IS DENIED.

19. IT IS FURTHER ORDERED that, pursuant to sections 4(i) and 303(r) of the Communications Act, as amended, 47 U.S.C. §§ 154(i), 303(r), and sections 0.331 and 1.949 of the Commission's rules, 47 C.F.R. §§ 0.331, 1.949, the request filed by Cellutec, Inc. to extend its license term IS DENIED.

FEDERAL COMMUNICATIONS COMMISSION

Catherine W. Seidel  
Acting Chief  
Wireless Telecommunications Bureau

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<sup>62</sup> 47 C.F.R. § 1.949(a). We further remind licensees that section 1.946 of the Commission's rules provides that "If a licensee fails to commence service or operations by the expiration of its construction period or to meet its coverage or substantial service obligations by the expiration of its coverage period, its authorization terminates automatically, without specific Commission action, on the date the construction or coverage period expires." 47 C.F.R. § 1.946(c).

<sup>63</sup> NAB Comments at 2-5.

<sup>64</sup> NAB Comments at 5-6.

## ATTACHMENT A

Call Sign	Market	Licensee Name
KNLB200	MEA001	NW Spectrum Co.
KNLB201	MEA007	BELL SOUTH WIRELESS CABLE INC
KNLB202	MEA006	BellSouth Mobile Data, Inc.
KNLB203	MEA013	AWACS, Inc.
KNLB204	MEA002	Comcast WCS ME02, Inc.
KNLB205	MEA032	Nextel Spectrum Acquisition Corp.
KNLB206	MEA017	NW Spectrum Co.
KNLB207	MEA030	WCS Wireless License Subsidiary, LLC
KNLB208	MEA003	WCS Wireless License Subsidiary, LLC
KNLB210	MEA001	Verizon Laboratories, Inc.
KNLB211	MEA035	AWACS, Inc.
KNLB213	MEA009	NW Spectrum Co.
KNLB214	MEA031	BellSouth Mobile Data, Inc.
KNLB215	MEA038	NW Spectrum Co.
KNLB216	REA011	CELLUTEC
KNLB217	MEA017	NW Spectrum Co.
KNLB218	MEA020	NW Spectrum Co.
KNLB219	MEA040	NW Spectrum Co.
KNLB220	MEA044	NW Spectrum Co.
KNLB221	MEA007	BELL SOUTH WIRELESS CABLE INC
KNLB222	MEA008	BELL SOUTH WIRELESS CABLE INC
KNLB223	MEA008	BELL SOUTH WIRELESS CABLE INC
KNLB224	MEA009	BELL SOUTH WIRELESS CABLE INC
KNLB225	MEA010	BELL SOUTH WIRELESS CABLE INC
KNLB226	MEA010	BELL SOUTH WIRELESS CABLE INC
KNLB227	MEA011	BELL SOUTH WIRELESS CABLE INC
KNLB228	MEA011	BELL SOUTH WIRELESS CABLE INC
KNLB229	MEA022	BELL SOUTH WIRELESS CABLE INC
KNLB230	MEA023	BELL SOUTH WIRELESS CABLE INC
KNLB231	MEA023	BELL SOUTH WIRELESS CABLE INC
KNLB232	MEA024	Nextel Spectrum Acquisition Corp.
KNLB233	MEA025	BELL SOUTH WIRELESS CABLE INC
KNLB234	MEA025	BELL SOUTH WIRELESS CABLE INC
KNLB235	MEA026	Nextel Spectrum Acquisition Corp.
KNLB236	MEA027	BELL SOUTH WIRELESS CABLE INC
KNLB237	MEA027	BELL SOUTH WIRELESS CABLE INC
KNLB238	REA002	BELL SOUTH WIRELESS CABLE INC
KNLB239	REA002	BELL SOUTH WIRELESS CABLE INC
KNLB240	REA004	BELL SOUTH WIRELESS CABLE INC
KNLB241	REA004	BELL SOUTH WIRELESS CABLE INC
KNLB242	REA009	CELLUTEC
KNLB243	MEA014	NTELOS Inc.
KNLB244	MEA014	AWACS, Inc.
KNLB245	MEA021	AWACS, Inc.
KNLB246	MEA024	BellSouth Mobile Data, Inc.
KNLB247	MEA028	BellSouth Mobile Data, Inc.
KNLB248	MEA029	BellSouth Mobile Data, Inc.
KNLB249	MEA034	AWACS, Inc.
KNLB250	MEA035	AWACS, Inc.
KNLB251	MEA036	AWACS, Inc.
KNLB252	MEA036	AWACS, Inc.
KNLB253	MEA037	AWACS, Inc.
KNLB254	MEA037	AWACS, Inc.
KNLB255	MEA038	NW Spectrum Co.
KNLB256	MEA039	AWACS, Inc.

KNLB257	MEA040	BellSouth Mobile Data, Inc.
KNLB258	MEA041	BellSouth Mobile Data, Inc.
KNLB259	MEA041	BellSouth Mobile Data, Inc.
KNLB260	MEA042	AWACS, Inc.
KNLB261	MEA042	AWACS, Inc.
KNLB262	MEA043	AWACS, Inc.
KNLB263	MEA045	BellSouth Mobile Data, Inc.
KNLB264	MEA047	AWACS, Inc.
KNLB265	MEA047	AWACS, Inc.
KNLB266	MEA048	BellSouth Mobile Data, Inc.
KNLB267	MEA050	AWACS, Inc.
KNLB268	MEA050	AWACS, Inc.
KNLB269	MEA051	AWACS, Inc.
KNLB270	REA007	AWACS, Inc.
KNLB271	REA007	AWACS, Inc.
KNLB272	REA008	BellSouth Mobile Data, Inc.
KNLB273	REA010	AWACS, Inc.
KNLB274	REA010	AWACS, Inc.
KNLB275	MEA004	Comcast WCS ME04, Inc.
KNLB276	MEA005	Comcast WCS ME05, Inc.
KNLB277	MEA012	BellSouth Mobile Data, Inc.
KNLB278	MEA016	Comcast WCS ME16, Inc.
KNLB279	MEA018	AWACS, Inc.
KNLB280	MEA019	Comcast WCS ME19, Inc.
KNLB281	MEA019	Comcast WCS ME19, Inc.
KNLB282	MEA022	Comcast WCS ME22, Inc.
KNLB283	MEA026	Comcast WCS ME26, Inc.
KNLB284	MEA028	Comcast WCS ME28, Inc.
KNLB285	MEA033	AWACS, Inc.
KNLB286	MEA043	AWACS, Inc.
KNLB287	MEA044	BellSouth Mobile Data, Inc.
KNLB288	MEA046	BellSouth Mobile Data, Inc.
KNLB291	MEA032	Nextel Spectrum Acquisition Corp.
KNLB292	MEA020	NW Spectrum Co.
KNLB293	MEA021	NW Spectrum Co.
KNLB294	MEA034	NW Spectrum Co.
KNLB295	MEA045	WCS Wireless License Subsidiary, LLC
KNLB296	MEA046	WCS Wireless License Subsidiary, LLC
KNLB297	REA001	WCS Wireless License Subsidiary, LLC
KNLB298	REA005	WCS Wireless License Subsidiary, LLC
KNLB299	REA005	WCS Wireless License Subsidiary, LLC
KNLB300	REA006	WCS Wireless License Subsidiary, LLC
KNLB301	REA006	WCS Wireless License Subsidiary, LLC
KNLB302	MEA015	WCS Wireless License Subsidiary, LLC
KNLB303	MEA015	WCS Wireless License Subsidiary, LLC
KNLB304	MEA016	WCS Wireless License Subsidiary, LLC
KNLB305	MEA018	WCS Wireless License Subsidiary, LLC
KNLB306	MEA029	WCS Wireless License Subsidiary, LLC
KNLB307	MEA033	WCS Wireless License Subsidiary, LLC
KNLB308	MEA048	WCS Wireless License Subsidiary, LLC
KNLB312	MEA002	Verizon Laboratories, Inc.
KNLB313	MEA003	Verizon Laboratories, Inc.
KNLB314	MEA004	Verizon Laboratories, Inc.
KNLB315	MEA005	Verizon Laboratories, Inc.
KNLB316	MEA006	Verizon Laboratories, Inc.
KNLB317	MEA012	Verizon Laboratories, Inc.
KNLB318	MEA013	Verizon Laboratories, Inc.
KNLB322	MEA030	NW Spectrum Co.
KNLB323	MEA031	NW Spectrum Co.

KNLB324	MEA039	AWACS, Inc.
KNLB325	REA003	AWACS, Inc.
WPQL631	REA001	Comcast WCS ME04, Inc.
WPQL632	REA003	Comcast WCS ME16, Inc.
WPQL633	REA003	Comcast WCS ME19, Inc.
WPQL634	REA001	BellSouth Mobile Data, Inc.
WPQL635	REA003	BellSouth Mobile Data, Inc.
WPQL636	REA001	Comcast WCS ME02, Inc.
WPQL707	REA001	BellSouth Mobile Data, Inc.
WPQL708	REA003	AWACS, Inc.
WPQL709	REA003	AWACS, Inc.
WPQL710	REA003	BellSouth Mobile Data, Inc.
WPQL711	REA003	BellSouth Mobile Data, Inc.
WPQL712	REA003	AWACS, Inc.
WPQL713	REA003	BellSouth Mobile Data, Inc.
WPQL714	REA003	AWACS, Inc.
WPSL350	MEA007	Nextel Spectrum Acquisition Corp.
WPSL351	MEA008	Nextel Spectrum Acquisition Corp.
WPSL352	MEA009	Nextel Spectrum Acquisition Corp.
WPSL353	MEA010	Nextel Spectrum Acquisition Corp.
WPSL354	MEA023	Nextel Spectrum Acquisition Corp.
WPSL355	MEA025	Nextel Spectrum Acquisition Corp.
WPSL356	MEA027	Nextel Spectrum Acquisition Corp.
WPSL357	MEA007	Nextel Spectrum Acquisition Corp.
WPSL358	MEA008	Nextel Spectrum Acquisition Corp.
WPSL359	MEA010	Nextel Spectrum Acquisition Corp.
WPSL360	MEA023	Nextel Spectrum Acquisition Corp.
WPSL361	MEA025	Nextel Spectrum Acquisition Corp.
WPSL362	MEA027	Nextel Spectrum Acquisition Corp.
WPYP768	MEA032	Nextel Spectrum Acquisition Corp.
WPYP769	MEA032	Nextel Spectrum Acquisition Corp.
WPZA810	MEA008	WaveTel NC License Corporation
WPZA811	MEA007	WaveTel NC License Corporation
WPZA812	MEA008	WaveTel NC License Corporation
WPZA813	MEA007	WaveTel NC License Corporation
WQDM396	REA003	BellSouth Mobile Data, Inc.